

CLAIMS

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1. An expression library comprising a repertoire of nucleic acid sequences cloned from a non-immunised source, each nucleic acid sequence encoding at least part of a variable domain of a heavy chain derived from an immunoglobulin naturally devoid of light chains.
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2. A library according to claim 1 wherein the repertoire of nucleic acid sequences is derived from lymphoid cells.
3. A library according to claim 1 or 2 wherein the repertoire of nucleic acid sequences is derived from cDNA clones.
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4. A library according to any one of claims 1 to 3 wherein the at least part of the variable domain of a heavy chain is derived from a camelid immunoglobulin.
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5. A method of preparing a library according to claim 3 or 4 comprising providing a repertoire of mRNA from a non-immunised source, treating the obtained RNA with a reverse transcriptase to obtain the corresponding cDNA and cloning the cDNA, with or without prior PCR amplification, into an expression vector.
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6. Use of a non-immunised source of nucleic acid sequences encoding at least part of a variable domain of a heavy chain derived from an immunoglobulin naturally devoid of light chains to prepare an expression library.
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7. A method for preparing antibody fragments derived from a non-immunised source having binding specificity for a target antigen comprising screening an expression library according to any one of claims 1 to 4 for antigen binding activity and recovering antibody fragments having the desired specificity.
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8. A method for preparing an antibody derived from a non-immunised source having binding specificity for a target antigen comprising attaching nucleic acid sequences encoding antibody fragments isolated from a library according to claims 1 to 4 to nucleic acid sequences encoding one or more heavy chain constant domains and expressing the product in a host cell.
9. Use of an non-immunised source of nucleic acid sequences encoding at least part of a variable domain of a heavy chain derived from an immunoglobulin naturally devoid of light chains to prepare an antibody fragment having binding specificity for a target antigen.

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